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Vth EUROPEAN CONGRESS OF AGRICULTURAL
ECONOMISTS

RESOURCE ADJUSTMENT AND EUROPEAN AGRICULTURE

BALATONSZÉPLAK, HUNGARY
1987.

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MANAGEMENT FOR SUCCESS IN MODERN AGRICULTURE

By
Rolf Olsson, Department of Economics and Statistics,
Swedish University of Agricultural Sciences,
S-750 07 Uppsala, Sweden

Abstract. The main message of this paper is that managerial and entrepreneurial skills of the farmers are going to play an increasingly important role in future developments in agriculture in western European countries.

One starting point is to identify some key factors in the environment of the family farm - factors which demand adjustments on the farm level. Another starting point is to look at some main structural changes affecting family farms and at the special nature of farming and of how family farmers live. Some definitions of the concepts of farm management and entrepreneurship will be reviewed. After that, empirical results from some Swedish studies and generalizations from these studies will be presented. Both successful and less successful farmers have been investigated. Also results from studies of growth and adjustment processes on individual farms will be reported. The paper is summarized with some conclusions concerning the human factor in modern agriculture. A number of requirements of the family farmer as a manager and an entrepreneur are formulated.

INTRODUCTION

In this paper the human factor - the manager - is put in focus in a discussion of resource adjustment and farming structures. The most important factor influencing what is happening on individual farms is the farmer and his managerial and entrepreneurial capacity ¹⁾. The main message of this paper will be that managerial and entrepreneurial skills of the farmers are going to play an increasingly important role in future developments in agriculture both on farm level and in the agricultural sector as a whole. The managerial capacity as a constraining factor in the growth and adjustments of farm firms is an aspect which is often forgotten in economic analysis and in discussions of resource adjustment in agriculture.

This paper applies primarily to the conditions of agriculture in the western European countries, where the majority of agricultural firms are family farms. A family farm can be defined as a primary agricultural business in which the operator is the risktaking manager and together with his family performs most of the farmwork and most of the managerial activities. In the following the concepts "family farm",

1) The concepts, "management", "manager", "entrepreneurship" and "entrepreneur" are often used in this paper. The meaning of these concepts are more discussed below (p. 8 ff). In the main the concepts here are used in accordance with Penrose (cf Penrose 1959, p. 31 ff).

"farm firm" and "agricultural firm" are used as synonyms. A "firm" is given the following definition: An administrative unit (i.e. not a technical unit) subject to independent planning for the benefit of the unit as a whole (cf Penrose 1959; Renborg 1970).

A major question to be discussed in this paper is: Why are some family farmers very successful, while other farmers, given similar circumstances, are unsuccessful and experience a crisis situation? When answering this question, we also find explanations concerning resource adjustment and farming structures. Increased knowledge of how different types of family farmers manage their farms will give us better possibilities to forecast the future developments in agriculture. If we can formulate important requirements of the family farmer as a manager and an entrepreneur and satisfy these requirements in education and in advisory service, it will be possible to help family farmers to survive in the future.

THE FARM MANAGER IN A TURBULENT WORLD

Discussions and papers in the Malaga conference of IAAE in 1985 have shown that essential new elements in the world around the farmer and the farming sector are: (I) increasing interdependence with the economy as a whole in society and (II) increasing uncertainty. Swedish experiences show that (III) a growing interest for and debate concerning environmental protection and (IV) new consumer attitudes towards the quality of food products are gaining in importance as factors causing changes in agriculture. Another important observation is that (V) an expanding flow of information and new knowledge meet the managers in the farming sector.

All these externalities increase the need for continuous adjustment both on the farm level and in the farming sector. Planning, formulating goals, strategies and business ideas and controlling the results of the business are now and in the future more important tasks for the family farmer than before.

Increasing interdependence with the economy as a whole

The farm firms and the farming sector are more dependent now than before on what is happening in the economic life in the society around this sector. This is a result of the fact that the farming sector now is a smaller part of the total economy than before. It is also connected with the growing importance in agriculture of purchased inputs. Tendencies and disturbances in the total economy influence the farmers and the farming sector more rapidly and with greater force than before. These interdependences are important to remember when discussing adjustment problems in agriculture.

Increasing uncertainty

The theme for the Malaga conference was "Agriculture in a turbulent world". The turbulences in the world around the farmer will increase rather than diminish in the future. The increasing uncertainty follows from the increasing integration of the economy of agriculture into the economy of the whole society and the world economy. It also follows from the increasing trade with food products on an expanding international market and from the increasing speed in technological

change. In the future we can expect new economic shocks of the same type as the oil crisis in the 1970's. We can also expect a greater uncertainty regarding the prices of food products on the world market and of the volumes of such products, which will be supplied and demanded. During the 1980's the market situation for food products has drastically changed in comparison with the conditions which prevailed during the 1970's. The American economist Robert Thompson has described the new situation in the following way:

"We find ourselves in a situation of substantial excess productive capacity in world agriculture relative to current and prospective demand. This is somewhat ironic, given that as recently as 1981, many observers forecast that demand would continue to grow more rapidly than capacity and that real commodity prices would increase continuously into the next century. Such analyses appear to have understated both the investments that were underway in productive capacity around the world and also the rate at which technological progress was raising global agricultural productivity". (Thompson 1987, p.1.).

The farmers have to adjust their production with regard to the consequences of political interference in order to solve problems in the agricultural sector and with regard to an uncertain market situation. The consequences for the farmers of the new market situation are: a) They have to expect decreasing prices and must adjust their production and production technology in order to meet this situation; b) The resource use and resource allocation on the farms can be influenced by the need to reduce the resource use for food production in the whole farming sector; c) There is a need to find new forms of organizing farms and agricultural production; d) Many farmers must find new and nontraditional production branches if they want to stay in business. Examples can be energy crops, crops to be used as raw material in industry, aquaculture, production and services connected to the recreation sector and forest production.

All these needs to adjust to a new market situation require a high degree of entrepreneurial skills on the part of the farm managers. The family farmer has to change from a role of producer of food products in a traditional way on a farm to the role of entrepreneur on a firm.

Environmental protection

Another new element in the world around the farmer today which influences his planning situation is a growing interest for and a debate concerning environmental protection. The discussions regarding agriculture contain signals of a demand for alternative production methods which combine high efficiency with consideration to the need for environmental protection and the related demand for minimization of the use of chemicals in the production process. The farmer has to take all these signals into consideration when planning and adjusting his production. (Cf SJFR 1985).

New consumer attitudes

Formerly, consumer attitudes were dominated by demands for high productivity in agriculture leading to low prices for food products. Today a number of new elements in the consumer attitudes have appeared. Together with a desire for low prices, demands for high quality food products, production processes taking environmental protection into consideration and a minimal distance from production to consumption are also essential for the consumer. These new attitudes influence the farmer's production planning and the planning of how to sell the products from the farm firm.

In Sweden we can observe a number of firms with production processes adjusted to the wishes of specified groups of consumers. The products from these firms are often sold directly to the consumer at the farm or marketed via special selling channels.

An expanding flow of information meets the farm manager

An expanding flow of information and of new knowledge characterize modern societies. This is also true for the farming sector. The farm manager seeks, receives, classifies and adjusts his activity on the basis of a lot of information concerning developments in the environment, market signals and new knowledge regarding production techniques. Successful managers pick up and adjust their activity to the new information earlier than other, less successful managers.

SOME STRUCTURAL CHANGES ON FARM FIRMS

Many structural changes have altered the situation for farming in recent times. Such changes are: (I) The changing proportions of capital and labour on farm firms; (II) The increased proportion of part-time farming; (III) Fewer and larger full-time farm firms; (IV) Integration of additional links of the food chain into the activities of many farm firms and (V) New activities and enterprises other than food production which are often today tied to the agricultural firm.

All these structural changes require increased management capacity in farm firms. The manager of the agricultural firm today has many roles. It is not enough for him to be a good farmer - a good producer of food products in a traditional way. The manager in modern agriculture must possess many of the qualities of a good entrepreneur.

Changing proportions of capital and labour

One of the long term structural changes within the agricultural firm is the increasing amount of working capital being used. Along the same lines, more and more purchased inputs (chemical fertilizer, pesticide, feed, etc) are being used within the firm. A table showing the changing proportions over time of the different factors of production in Swedish agriculture has been put together (cf Uhlin 1984; Renborg 1986). The costs are divided up in the table in terms of labour, physical capital and inputs. The cost for physical capital (buildings and machinery) accounted for 18 % of total costs in Swedish agriculture in 1965. In 1982 this figure had increased to 30 %.

The table also shows that the share of purchased inputs has increased during the same period from 17 to 31 % of the total costs. The labour input, which previously accounted for a major share of the production factor input in agriculture, accounts for a decreasing share of the total cost. Between 1965 and 1982 labour's share of the total cost decreased from 65 to 39 %. Previously, the family farmer had several coworkers whereas now he is often alone. He is responsible for both the labour and the management input. He can no longer regulate his income largely by adjusting his own labour input. The family farmer of today is both a producer and manager of substantial capital assets. He must possess both skills in the production process and significant organizational and economic skills.

Table 1. The relative cost dividends of different production factors distributed to three main groups

	1965 %	1970 %	1975 %	1982 %
Labour	65	54	46	39
Real capital	18	22	26	30
Necessities (production capital)	17	24	28	31
Total	100	100	100	100

Sources: Swedish Board of Agriculture; Uhlin 1984.

An increased proportion of part-time farmers

Part-time farming is playing an increasingly important role in Sweden and other western countries. A recent study ("Deltidslantbrukets struktur och betydelse") revealed that only 40 percent of Swedish agricultural firms can be called full-time farms. A full-time farm is defined as a firm with a labour input of more than 1 600 "normative" working hours. Of these, about 8 percent are regarded as large farms (>4000 hours). True "family farms" therefore account for only 32 percent of the total number of firms in Swedish agriculture. Farms with a labour input of less than 800 hours can be called "residential" or "recreational" farms. They are not particularly interesting in a discussion of farm management and the structural development of agriculture in spite of the fact that they account for 38 percent of the total number of firms. True part-time farms (800-1600 hours) account for 22 percent of the total number. Part-time farmers combine substantial on-farm activity with paid employment or other types of entrepreneurial activity.

We can observe a trend in the structural development of agriculture towards, on the one hand, efficient, expansive, full-time firms often operated as family farms and, on the other hand, an increasing number of part-time farms. Both types of firms have special management requirements. Successful full-time farmers must be a combination of skilled producer and skilled entrepreneur. The part-time farmer needs

primarily to have organizational skills in order to successfully combine different types of activities.

Fewer and larger full-time farm firms

A full-time family farm today looks quite different than it did some decades ago. In 1985 there were 33 000 full-time family farms (1 600 - 4 000 "normative" working hours) in Sweden. The mean firm in this group of firms can be described in the following way:

36 ha arable land
47 ha forest land
2 600 normative working hours
1 500 000 SEK total invested capital

Source: "Deltidslantbrukets struktur och betydelse".

As a consequence of technological change and relative price development more and more capital has been tied to the labour force of the family. This expansion process was necessary if the farmers wanted to stay in business as full-time farm managers. But for successful survival as family farmers they had continuously also to adopt new techniques and increase the production efficiency. For the period 1960-1975 this adjustment process of production methods was more essential for the sector than exploiting economies of scale. (cf Uhlin 1985 and 1987).

Another observation is that relative price developments have gradually increased the gross revenue which is necessary in order to keep a certain amount of net earnings (cf Renborg 1986).

We have not seen the end of the adjustment process discussed above. The family farmer who wants to stay in business and successfully manage his farm in the 1990's has to continue the expansion and adjustment processes of the firm. This adjustment processes requires a great managerial capacity on the part of the family farmer.

Integration with the farm of more links than previously in the food chain.

A development which can be observed in Sweden during the recent years is that some farm managers integrate more links than previously in the food chain with the activity on their farm firms. Traditionally farmers were only occupied with primary production. The new tendency in Swedish agriculture is that processing, distribution and marketing food products are also activities which some farm managers have integrated into their firms. This is a new type of expansion process which requires special qualities on the part of the manager. A greater sensitivity towards market signals and an ability to find the best marketing channels are new skills which are essential for these farmers.

Combination of farming with non-farm enterprises

Another structural change in Swedish agriculture is that the number of farmers, who combine farming with activities in other types of enterprises is growing. A new study ("Deltidslantbrukets struktur och betydelse") shows that in 1985 as many as 8000 farmers had some type of enterprise outside of farm production but tied to the farm firm.

The knowledge of these firms is insufficient. We can probably find a great variety of combinations in this group of firms. Activities in different types of service sectors are possible to combine with farming. An example can be administration and management of dwelling-houses for recreational purposes. To successfully combine several type of enterprises a broad managerial and entrepreneurial capacity is required on the part of the manager.

THE SPECIAL NATURE OF FARMING AND FARM LIFE

The economic developments and structural changes, which have been discussed above, have drastically changed the working conditions for the family farmer. During the last decade he has received signals from the environment and from his business which have been quite new for him. Formerly it was possible to manage and control the farm with a mix of experience and common sense. This is no longer enough. The family farmer must be both producer and entrepreneur. But many farmers ask themselves how this shall be possible. Farmers often have unsatisfactory competence in economics and in farm management. In textbooks used in agricultural schools, young people who want to be farmers can read about the farm as a firm and about the need for controlling the production processes in farming in the same way as in industrial processes. However, it is still very usual also among young people to view at themselves primarily as producers of food products. Among middleaged farmers, this view is still dominant.

A Norwegian investigation (Sörli 1982) of managers of small firms in sectors other than agriculture show that these persons also have similar problems with the leader role. Interest for production often dominates. Managers in small firms have a way of working and a leadership style, which not is the same as what is usual for managers in large firms and organizations. Perhaps one of the explanations of this fact can be found in the attitude which many farmers and managers of other small firms have to their activity - they look at their manager role as a lifestyle, rather than as a job as an entrepreneur, leading and controlling a firm.

We often hear farmer saying that they have not chosen a profession - they have chosen a way of life. They have their roots and traditions from the countryside - often from the farm they are managing. They want to administer the farm, produce food products on it and turn it over to the next generation. This creates very special attachments to the activities on the farm. (Cf Christiansen 1983; Jansson 1984). It is very difficult for this common type of farmer to change their attitudes and only look at their farms as firms with goals which are necessary to reach and strategies which are necessary to follow. Here, we observe a critical dilemma. There is a high threshold for many family farmers to climb over when adjusting their way of managing the farm from a traditional approach to a role as entrepreneurs of a firm.

We can summarize the special conditions for family farms and for farming in the following way:

- The heart of farming is the managing of biological processes in which the dependence on biological risks and on weather variations are essential.

- The production place and the place of living are normally the same.
- There is an interrelationship between the private economy - the family economy - and the economy of the firm.
- Many family farmers look at their activity as a way of life - they look at themselves as producers of food products.
- Many farmers have insufficient competence in economics and especially in the entrepreneurial aspects of farm management.

However, in spite of all the aspects we have discussed above; our main conclusion must be that management for success in modern agriculture contains much more than what farmers traditionally include in the concept of farm management. The traditional features of the farmer-role contrast heavily to the need for economic awareness, increased marketing activity and entrepreneurship that the earlier pictured development requires.

THE CONCEPTS OF FARM MANAGEMENT AND ENTREPRENEURSHIP

We will now review some definitions of what economists include in the concepts of farm management and entrepreneurship. We can find a great deal of literature in this field. We can therefore only give some examples here.

A Swedish group (KSLA 1986) has formulated the following points as the most essential to include in the concept of management:

- a formulation of the firm's goals in different time perspectives.
- to aim activities towards satisfying client needs/wants in changing markets where products and services are rendered and production inputs acquired.
- the coordination and development of all the human, physical and financial resources the firm possesses or can acquire to a functioning whole which can reach established goals over time.

Renborg & Fock (1977) have differentiated the activities of the farmer in the following way:

	Physical production	Management
Routine work	Now used techniques and methods	Management of the production
Creating work	Changes and uses of new techniques and methods	Entrepreneurship

Renborg & Fock comment March & Simon's (1958) observation that there is a competition between routine work and managerial work - there is a risk that routine work is given a higher priority than planning and other more qualified tasks (Renborg & Fock, p. 15; March & Simon, p. 158).

The concept of entrepreneurship is of special interest here. Renborg & Fock (1977) (see KSLA 1986, p. 5.2) have developed this concept in the following way:

"Entrepreneurship is the ability of management to control and analyze the organization of the firm, discovering its strengths and weaknesses. It is the early discovery of development trends and change in the environment, and the reaction to and exploitation of these. It is also knowing one's market, convincing fellow workers, clients and banks that any changes planned are appropriate and important. Entrepreneurship involves increasing one's own knowledge of economics, engineering and biology, and turning that knowledge into concrete activities within the firm".

Penrose (1959) defines entrepreneurship as "a psychological predisposition on the part of individuals to take a chance in the hope of gain" (p.33). She includes the following dimensions in the concept entrepreneurship: Versatility, fund-raising ingenuity, ambition and judgment (p 36 ff).

Hubendick et al (1982) have mentioned the following qualities of the entrepreneur: Environment orientation, positive attitude to changes and to uses of new possibilities, motivation for ideas and visionary goals, directing toward result, working in the deep and starting up activities (p.20).

A Swedish consultant (Göran Odeen) for small firms in different business sectors stresses the following components:

- Formulating and re-testing the business idea of the firm
- Formulating goals (concrete, reachable, measurable, time-distinated)
- Doing things (activities)
- Measuring and controlling the result of the business

SOME RESULTS FROM EMPIRICAL STUDIES IN SWEDEN

In this section, results of empirical studies concerning the management and success of farm firms in Sweden will be presented (Insulander et al 1986). The purpose of the studies has been to explore the question: Why are some farmers successful, while other farmers, given similar circumstances, are unsuccessful and experience a crisis situation? In a preliminary study (Insulander 1984) several farms in a crisis situation were studied. The most important conclusion from that study was that farmers characteristics were of central importance to the performance of their farm operations. Therefore, following studies concentrated on improving our understanding of the relationship between the types of farm management and the success of the farm firm.

Through use of mail-questionnaires to and personal interviews with farm managers a number of component studies have been carried out. In addition, farm budgets have been used to analyze farms. We describe how several Swedish family farmers view their goals, and what factors

they consider most important for success. We have studied typical Swedish family firms. Both successful and less successful farmers have been investigated. The farmers were not chosen through random sampling. Probably there is a positive bias in the material. From the empirical material, a conceptual model has been developed to capture the relationship between values, goals and success.

The positive relationship built up with farmers as the work progressed has given us a unique opportunity to see inside the everyday functioning of the firm. Farmers have taken us into their confidence when discussing the development of their firms, its problems and potentials.

Management is the principal explanatory factor

The most important conclusion the studies point to is that the success of the firm depends on the leadership characteristics of management. This is illustrated in Table 2, where farmer response to the question concerning prerequisites for success as a farmer are listed. Our studies show that successful farmers are more conscious than less successful farmers of the importance of management capacity and qualities as essential prerequisites for success.

Table 2. Farmers response to the question concerning prerequisites for success as a farmer 1)

	Farmers responding to mailed survey (57) response (%)	Farmers inter- viewed (26) response (%)
Leadership/management ability, skilled at and interested in the profession	58	69
Favorable resource situation within the the firm	26	13
External factors (prices, institutional conditions)	16	18
Total	100	100

1) The farmers had to choose three of thirteen given prerequisites.

Source: Insulander et al. 1986.

Similar results have been obtained in earlier studies conducted both in Sweden (cf Westermarck 1951) and in other countries (cf Justus & Headly 1968). Muggen (1969) states that:

"There is a growing awareness that only a part, perhaps a very small part, of differences in farm income and efficiency can be explained by differences in quality and quantity of land, labour and capital. The rest of the variation must be explained mainly by the factor, management".

Even studies conducted in other fields yield similar results. One such example is a series of interviews with successful businessmen

conducted by Johannisson et al (1976). One of the questions put to the 24 businessmen was: Why has your business been more successful than others? The answers most often received were (p. 153):

- We have responded to client needs with greater speed and flexibility.
- We have concentrated efforts in our area of specialization and not diversified into areas we are not as capable in.
- We have been way ahead in terms of technology.
- We have expended more efforts than our competitors in economic planning.
- We have better personnel.

The striking thing about this study is the significance of the ability of the manager to adapt to changing conditions in the external environment.

Growth problems a common cause of crisis situations within the firm

Our studies of Swedish agricultural firms show that firms with economic problems have often experienced a period of expansion. In these cases the problems most often concern liquidity rather than profitability.

A problem connected with firm growth is that a larger firm requires increased knowledge and knowledge of a type that is partly new to the entrepreneur. New functions and new tasks will become of topical interest to the decision-maker as the firm grows bigger. The more rapid growth the heavier the burden in management to gather new knowledge, to plan and to organize the growth process. These circumstances lead to growth costs which after some point grow more rapidly than profit increase, thus creating limits to growth, not absolutely and in the long run, but per unit of time. (Penrose 1959). Penrose developed her theory of the growth of the firm for large industrial firms. However, crucial parts of her theory are valid also for agricultural firms (cf Renborg & Karlsson 1969; Renborg 1970; Olsson 1971).

In Swedish studies the concept of growth costs is redefined and broadened to the concept of growth sacrifices defined as:

"All expenditure and reduction of income which are directly caused by growth and which disappear when growth has been carried out" (Andersson 1972).

From our Swedish empirical studies (Andersson 1972; Johansson & Saksberg 1977; Insulander 1984) we can give some examples of growth sacrifices:

- Deficient exploitation of capacity several years subsequent to a large investment (empty stalls for example, until planned herd size is achieved).
- Interrupted and disturbed production in existing and new activities

in connection with an expansion/renovation in the production process. Planned yields are often only achieved after several years.

- Unforeseen cost increases. This is especially the case for investments in buildings.
- Omission or underestimation of complementary investments occurs when planning expansion/renovation of the production process.

The main conclusions concerning growth problems are:

- Growth sacrifices are usual during the first years after the establishment of a farm firm or after a big investment.
- A crisis of a farm firm is often caused by growth sacrifices.
- There is a near connection between the ability of the entrepreneur and the existence and size of growth sacrifices.
- It is possible to foresee many types of growth sacrifices and to avoid or diminish them through better planning.

The problems of growth and the concept of "growth sacrifices" can be widened to apply to problems of adjustment and adjustment costs within the entire agricultural sector. There are certainly many parallels which may be drawn. There are many adjustment problems which occur in the structural development in agriculture. It would be interesting to study the adjustment costs connected with this structural change summarized to the level of the whole agricultural sector.

Formulating goals is essential for success

It is abundantly clear from farmer interviews that goals and success are intimately related. It is also clear that there is no direct relationship between success and age, education, type of production, etc. The study shows that managers have a variety of own goals that they seek to achieve, most of them non-economic. Most farmers, though, have some form of basic economic goal in terms of profitability, survival and the possibility of the next generation carrying on. The farmers' goal hierarchy varies over time. Young, newly established farmers have different goals than older, more consolidated farmers. Our studies indicate that managers with clearly defined goals are generally more successful.

The types of goals which are dominant within the firms studied are shown in Table 3.

Table 3. Farmer response to important goals in order to be a successful farmer 1)

	Farmers responding to mailed survey (57) Response (%)	Farmers inter- viewed (26) Response (%)
Family and firm level goals	56	55
Goals at the level of production activity	15	12
Environmental goals (working environment, leisure requirement, etc)	29	33
Total	100	100

1) The farmers had to choose three of sixteen given alternative goals.

Source: Insulander et al 1986.

The concept of success

The studies made us aware of the problem that success can mean different things to different individuals. We found farmers who considered themselves relatively successful because they had achieved many of the goals they were working toward. These farmers were often unaware of the fact that their behavior would weaken the firm in the long run. On the other hand we found farmers who regarded themselves as failures because the firm was experiencing severe liquidity problems. Our estimates, however, showed these firms to be profitable, so that the farmer should have perceived himself as successful. These examples clearly show the problem of defining success.

Fulfilment of own goals leads the farmer to perceive himself as successful ("subjective success"). Fulfilment of goals that external actors (government authorities, banks, associations, suppliers) consider important leads to the farm manager being considered successful by his surroundings ("normative success").

The farmer who is able to combine fulfilment of his own goals with the fulfilment of basic economic goals can be considered successful from two points of view - his own and the surroundings.

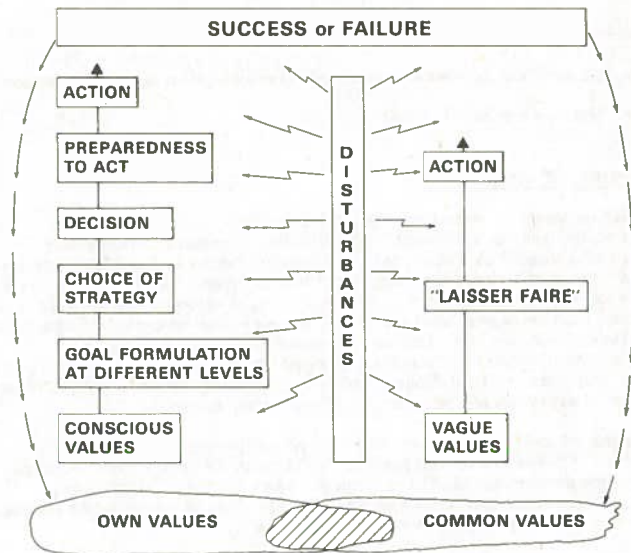
The relationship between values, goals and success

Basic values play a role in shaping the manager's goals. We have found that the awareness on the part of the manager of his own values is essential for him to be able to formulate goals. The reality that the manager works with is multi-dimensional, all situations are different. It is therefore impossible to isolate a certain type of behavior as right or wrong in a decision-making situation. The crucial factor, rather, is that the managers behavior is in accordance with his values.

We therefore focus on the farmer and his values when exploring why certain managers are more successful than others. Thus we exclude both the environment and the firm as vital explanatory factors in explaining failure and success. External factors can initiate a crisis within the firm, however the real reason can often be found in the behavior of the manager.

A conceptual framework showing values, goals and success is shown in Figure 1.

Figure 1 Conceptual model: The relationship between values, goals and success



Source: Insulander et al 1986.

The left side of the figure shows a manager with clear, well-established values, which can be traced back to his childhood and family. He is aware of his wants and expresses them in concrete goals at different levels. He believes strongly in what he is doing at the same time as he has a realistic view of his own ability to accomplish what he undertakes. He is therefore always prepared to deal with external and internal disturbances. The manager steers his behavior with a decision-making process which can be summarized as follows: goal formulation at different levels, strategic thinking in all phases, decision, action. This manager is often successful both in

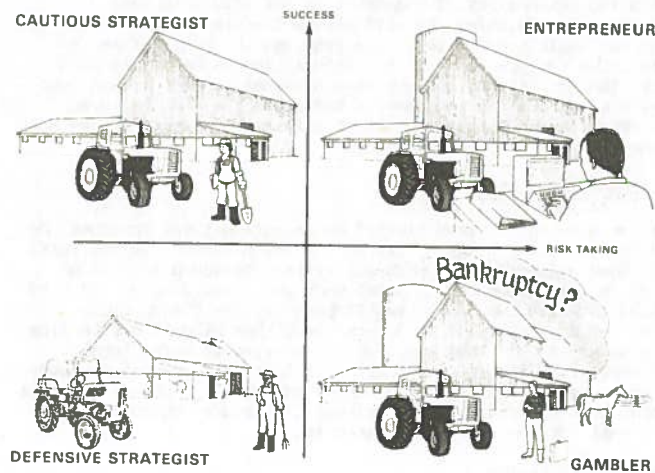
subjective and normative terms. The right side of the figure illustrates a manager with vague values. He hasn't really thought about how he wants to run his business and has no clearly formulated goals. This leads to a lax attitude without conscious decision-making within the firm. This manager is probably less successful. He is representative of a group of farmers among whom many of those in crisis can be found.

It should be pointed out that the two types of managers in this conceptual model represent the theoretical extremes of how different values affect management style. The conceptual model is based on the results of our studies of actual agricultural firms.

Four types of farm managers

The conceptual model in Figure 1 describes primarily the role of values but also the significance of goals in success and failure. This conceptual model is not sufficient, however, to illustrate all of the factors which contribute to success. Figure 2, therefore, presents four types of farm managers. This is a development of the conceptual model in Figure 1 where risk perception and ability to cope with risk are added as an extra dimension. Figure 2 is also a conceptual model, however the characteristics assigned to the different types of managers have been found among the farmers studied.

Figure 2 Four different types of farm manager



Source: Insulander et al 1986.

We shall highlight some typical characteristics of the four different

types of farm manager.

Of course there are no clear dividing lines between the different leadership styles, as this presentation may imply. In practice, "pure" types may be difficult to find. This is, rather, an attempt to describe the extremes as they are shown in the squares in Figure 2.

The entrepreneur

The entrepreneur regards himself as not only an agricultural producer but also as a person with the overall economic and management responsibility for the firm. Management is based on a clearly formulated business idea. He does not necessarily have an agricultural background. He is prepared to take relatively large risks, but has the ability to see the potentials instead of the problems that increased risk taking entail. The entrepreneur sees to it that he has the information he needs prior to decision-making. He studies the relevant literature and has the ability to surround himself with good advisors. The entrepreneur has a wide circle of contacts both within and outside his own field of interest. The entrepreneur thinks in strategic terms and devotes considerable time to planning and management. His actions are characterized by careful deliberation, he is not impulsive. The entrepreneur is often a very successful manager.

The gambler

The gambler is a type of manager who does not want to think of himself as a farmer. He is not a strong manager even if he may have a strong and convincing personality. The gambler is not afraid to take significant risks. He thinks he will always find new possibilities but he has no realistic conception of the problems which may arise. He therefore takes few precautions. His information gathering is rather arbitrary. The gambler has an impulsive personality and perhaps overestimates his own ability to manage a business. The gambler is an optimist. Many farmers in situations of crisis or bankruptcy have some of the characteristics of the gambler.

The cautious strategist

The cautious strategist views himself as an agricultural producer. He sees his profession as a way of living. He has his roots in the rural areas. He does not experiment with activities outside his field of competence, a competence he has spent many years building up. "A bird in the hand is worth two in the bush" characterizes the cautious strategist who does not want to jeopardize either himself or his firm with unnecessary risks. Thus the cautious strategist works largely with own capital. Information gathering is done in such fora as study groups, where he welcomes the opportunity to air his problems together with peers. He also studies some business literature. Things almost always go well for the cautious strategist.

The defensive strategist

The defensive strategist is one who avoids as much risk as possible. His choice of strategy is a function of his defensive attitude towards decision-making. This results, among other things, in a lack of necessary reinvestments whereby the firm becomes so rundown that it uses up its productive resources.

Management - a multi-dimensional art

We have learned that successful farm management entails many more dimensions than simply producing agricultural products. Successful farmers see the potentials in a changing world. They have clearly defined goals and can see how the firm's resources can best be used to achieve these goals. Less successful farmers see the threat instead of the potential in a changing world. They see the firm's resources as a limiting factor rather than as a basis from which to achieve goals.

Our studies of successful farmers reveal a number of clues as to what is necessary for successful management. Table 4 represents an attempt to integrate part of the conceptual model (figure 1) with typical characteristics of the two successful types of farm manager (figure 2). It is neither possible nor desirable to find a farmer with all of these characteristics. Only a few, if any, farm managers can live up everything mentioned in Table 4. The purpose of the review is rather to point out areas of importance for the manager. A successful farmer should have several of the characteristics listed.

A positive view of all types of managers is desirable

Agriculture finds itself in a process of continuous structural change. Changes at the firm level are part of this. Failure on the part of the individual farmer can lead to something positive for the agricultural sector as a whole. The manager who takes substantial risks without being able to master them (gambler) can clear the way for someone else. The firm he has built up can be taken over by a more successful manager after his failure. Those managers characterized here as "defensive strategists" often manage firms which will eventually cease to function as agricultural units. Some farmers even have a conscious policy to wind down operations. These farmers are perhaps less successful in the normative sense but can achieve success in the subjective sense if they are able to cease operations. We should therefore be aware that the opposite of success, from a normative point of view, is not always failure. A positive view of all types of managers is therefore desirable from a holistic perspective.

External actors (politicians, advisors, lenders, teachers, researchers, etc) must be aware of the fact that there are different types of managers and that they have different goals and conditions. This should be taken into account when external actors deal with the farm manager. Inputs such as advisory service and continuing education can therefore not be too general nor based solely on the demands of the surrounding environment.

Table 4. Characteristics of "the entrepreneur" and "the cautious strategist" observed in the studies of Swedish Farmers

The entrepreneur Values and personal characteristics	The cautious strategist
<ul style="list-style-type: none"> - farming as a business - stable base of own, clear-cut values - manager with overall responsibility - realist with an appreciation of own limitations - self-confidence and judgement - creative enthusiasm, full of initiative - talent for business 	<ul style="list-style-type: none"> - farming as a lifestyle - stable base of common values - values characterized by caution - farmer with an instinct for preserving resources - stable with "both feet on the ground"
Business ideas	
<ul style="list-style-type: none"> - conscious and clearly formulated business idea 	<ul style="list-style-type: none"> - motivated to preserve the farm for the next generation
Goals	
<ul style="list-style-type: none"> - clearly formulated and operational goals - goals on several different levels 	<ul style="list-style-type: none"> - has goals but they are not clearly formulated - practical, rather than an environmental spontaneity
Decision making/development	
Strategy	
<ul style="list-style-type: none"> - evaluation of strategic consequences of action - sees potential and discovers obstacles - action is decided upon course of action 	<ul style="list-style-type: none"> - cautious in thinking, course of action cautious, "the bird in the hand is worth two in the bush" - sees obstacles and avoids them
Planning	
<ul style="list-style-type: none"> - formal strategic planning and analysis - formal budget in readiness to use in decision-making 	<ul style="list-style-type: none"> - informal planning and analysis - budget "in the head"
Risk taking/financing	
<ul style="list-style-type: none"> - willing and prepared to handle financial risks - not able to evaluate capital - not afraid of uncertainty and risk 	<ul style="list-style-type: none"> - unwilling to take risks - cautious and financial caution - self-financing as a matter of course
Information gathering	
<ul style="list-style-type: none"> - active collection of information - always on the look-out for new ideas - sensitive to the signals from the outside environment - thorough knowledge of the limits of the farm resources and what has already been used or reserved - well prepared for external and internal disturbances 	<ul style="list-style-type: none"> - wide information gathering - uses an extensive range - information and knowledge from study, media and experience - thorough knowledge of the farm resources
Production	
<ul style="list-style-type: none"> - "production is a means" 	<ul style="list-style-type: none"> - "production is the end"

Source: Lundvall et al. 1986

SUMMARY AND CONCLUSIONS

The message of this paper can be summarized in the following points:

- The developments in the world around the farm firm and a number of structural changes within the farms and the farming sector increase the need for high quality of managers of family farms in modern agriculture.
- Management capacity is a key factor in modern agriculture. Therefore, development of entrepreneurship, good basic education and continuing education plus qualified individual advice to the farm managers should be given high priority.
- The human factor - the farm manager and his family - ought to be taken into more consideration in economic analyses and in developments of economic theories.
- There exist several types of farm managers with different values, goals and backgrounds, different willingness to take and handle risk, and different probabilities to achieve success. This should be considered by external actors (authorities, teachers, advisors, bank people, researchers, etc). In Swedish studies the following four types of farm managers were identified: the entrepreneur, the gambler, the cautious strategist and the defensive strategist.
- Two concepts of success - subjective and normative success - can be identified. Subjective success is central for an individual farmer. Normative success is central for external actors.
- A strong relationship between the activities on the farm firm and the values and goals of the farm manager is an important condition for success.
- The implications of success for the individual farmer change over time.
- There are close links between changes on the individual farm firm and changes in the agricultural sector as a whole.

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